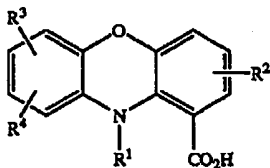


## IN THE CLAIMS:

Claim 1 (currently amended): A compound of the Formula I



and pharmaceutically acceptable salts, esters, amides, and prodrugs thereof, wherein:

R¹ is hydrogen, lower alkyl, or cycloalkyl;

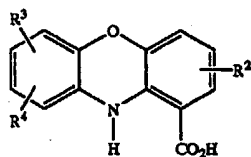
R² is hydrogen; lower alkyl, lower alkoxy, halogen, hydroxy, aryl, heteroaryl, arylalkyl, heteroarylalkyl, arylalkoxy, heteroarylalkoxy, cyano, carboxy, alkoxy-carbonyl, carbamoyl, sulfamoyl, nitro, trifluoromethyl, amino, or mono- or dialkylamino;

R³ and R⁴ independently are hydrogen, lower alkoxy, aryl, heteroaryl, halogen, hydroxy, cyano, carboxy, alkoxy-carbonyl, carbamoyl, sulfamoyl, nitro, trifluoromethyl, amino, mono- or dialkylamino, or lower alkyl or lower alkenyl unsubstituted or substituted with one, two or three groups independently selected from oxo, halogen, hydroxy, carboxy, carbamoyl, amino, mono- or dialkylamino, or aryl or heteroaryl optionally substituted independently with up to three groups selected from halogen, lower alkyl, lower alkoxy, hydroxy, carboxy, alkoxy-carbonyl, cyano, nitro, trifluoromethyl, amino, mono- or dialkylamino, carbamoyl, carboxyalkyl, alkoxy-carbonylalkyl, sulfamoyl, or carbonylamino, or

R3 and R4 together form a carbocyclic group containing from five to seven members, up to two of which members are optionally heteroatoms selected from oxygen and nitrogen, where the carbocyclic group is optionally substituted with one or two groups selected from halogen, lower alkyl, lower alkoxy, mono- or dialkylamino, aryl, arylalkyl, or a heterocyclic group[[]]

with the proviso that: (a) R1 cannot be hydrogen or ethyl when R2, R3 and R4 are hydrogen; (b) R3 cannot be nitro, methyl, chloro, trifluoro, fluoro, or carboxylic acid when R1, R2 and R4 are hydrogen or when R4 is chloro; (c) R2 cannot be a methoxy or nitro group when R1, R3 and R4 are hydrogen; and (d) R4 cannot be methyl, nitro, trifluoromethyl, phenyl, cyano or carboxylic acid when R1, R2 and R3 are hydrogen.

Claim 2 (currently amended): A compound of the Formula II



and pharmaceutically acceptable salts, esters, amides, and prodrugs thereof, wherein:

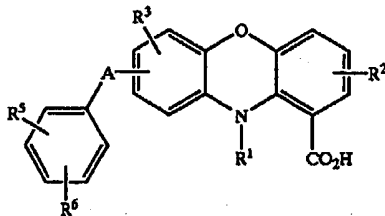
R<sup>2</sup> is hydrogen, lower alkyl, lower alkoxy, halogen, hydroxy, aryl, heteroaryl, arylalkyl, heteroarylalkyl, arylalkoxy, heteroarylalkoxy, cyano, carboxy, alkoxycarbonyl, carbamoyl, sulfamoyl, nitro, trifluoromethyl, amino, or mono- or dialkylamino;

R3 and R4 independently are hydrogen, lower alkoxy, aryl, heteroaryl, halogen, hydroxy, cyano, carboxy, alkoxycarbonyl, carbamoyl, sulfamoyl, nitro, trifluoromethyl, amino, mono- or dialkylamino, or lower alkyl or lower alkenyl unsubstituted or substituted with one two or three groups independently selected from oxo, halogen, hydroxy, carboxy, carbamoyl, amino, mono- or dialkylamino, or aryl or heteroaryl optionally substituted independently with up to three groups selected from halogen, lower alkyl, lower alkoxy, hydroxy, carboxy, alkoxycarbonyl, cyano, nitro, trifluoromethyl, amino, mono- or dialkylamino, carbamoyl, carboxyalkyl, alkoxycarbonylalkyl, sulfamoyl, or carbonylamino, or

R3 and R4 together form a carbocyclic group containing from five to seven members, up to two of which members are optionally heteroatoms selected from oxygen and nitrogen, where the carbocyclic group is optionally substituted with one or two groups selected from halogen, lower alkyl, lower alkoxy, mono- or dialkylamino, aryl, arylalkyl, or a heterocyclic group[.]

with the proviso that: (a) R2, R3 and R4 cannot be hydrogen; (b) R3 cannot be nitro, methyl, chloro, trifluoro, fluoro, or carboxylic acid when R2 and R4 are hydrogen or when R4 is chloro; (c) R2 cannot be a methoxy or nitro group when R3 and R4 are hydrogen; and (d) R4 cannot be methyl, nitro, trifluoromethyl, phenyl, cyano or carboxylic acid when R2 and R3 are hydrogen.

Claim 3 (original): A compound of the Formula III



and pharmaceutically acceptable salts, esters, amides, and prodrugs

thereof, wherein:

A is absent, or is

lower alkyl or lower alkenyl unsubstituted or substituted with one or two groups independently selected from oxo, halogen, hydroxy, carboxy, carbamoyl, amino, mono- or dialkylamino;

R¹ is hydrogen, or lower alkyl;

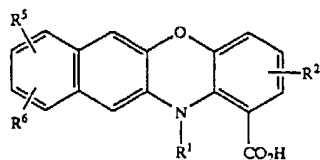
R², R⁵, and R⁶ are independently hydrogen, lower alkyl, lower alkoxy, halogen, hydroxy, aryl, heteroaryl, arylalkyl, heteroarylalkyl, arylalkoxy, heteroarylalkoxy, cyano, carboxy, alkoxycarbonyl, carbamoyl, sulfamoyl, nitro, trifluoromethyl, amino, or mono- or dialkylamino; and

R³ is hydrogen, lower alkoxy, aryl, heteroaryl, halogen, hydroxy, cyano, carboxy, alkoxycarbonyl, carbamoyl, sulfamoyl, nitro, trifluoromethyl, amino, mono- or dialkylamino, or

lower alkyl or lower alkenyl unsubstituted or substituted with one, two or three groups independently selected from oxo, halogen, hydroxy, carboxy, carbamoyl, amino, mono- or dialkylamino, or

aryl or heteroaryl optionally substituted independently with up to three groups selected from halogen, lower alkyl, lower alkoxy, hydroxy, carboxy, alkoxycarbonyl, cyano, nitro, trifluoromethyl, amino, mono- or dialkylamino, carbamoyl, carboxyalkyl, alkoxycarbonylalkyl, sulfamoyl, or carbonylamino.

Claim 4 (original): A compound of the formula



and pharmaceutically acceptable salts, esters, amides, and prodrugs thereof, wherein:

R¹ is hydrogen, or lower alkyl; and

R², R⁵, and R⁶ are independently hydrogen, lower alkyl, lower alkoxy, halogen, hydroxy, aryl, heteroaryl, arylalkyl, heteroarylalkyl, arylalkoxy, heteroarylalkoxy, cyano, carboxy, alkoxycarbonyl, carbamoyl, sulfamoyl, nitro, trifluoromethyl, amino, or mono- or dialkylamino.

Claim 5 (currently amended): A compound according to claim 1, which is selected from:

~~Phenoxazinecarboxylic acid~~

3-Nitrophenoxazinecarboxylic acid;

3-(Phenylmethoxy)phenoxazinecarboxylic acid;

9-Chloro-8-(trifluoromethyl)benzo[b]phenoxazinecarboxylic acid;

Benzo[b]phenoxazinecarboxylic acid;

8,9-Dimethylbenzo[b]phenoxazinecarboxylic acid;

8,9-Dihydroxybenzo[b]phenoxazinecarboxylic acid;

8,9-Dichlorobenzo[b]phenoxazinecarboxylic acid;

7-Phenylphenoxazinecarboxylic acid;

7-(3,4-Dichlorophenyl)phenoxazinecarboxylic acid;

7-Benzylphenoxazinecarboxylic acid;

7-[(3,4-Dichlorophenyl)methyl]phenoxazinecarboxylic acid;

7-[2-(3,4-Dichlorophenyl)ethyl]phenoxazinecarboxylic acid;

8-(3,4-Dichlorophenyl)phenoxazinecarboxylic acid;

3-Nitrobenzo[b]phenoxazinecarboxylic acid;

3-Nitro-8-phenylphenoxazinecarboxylic acid;

7-[2-(3,4-Dichlorophenyl)ethyl]-3-nitrophenoxazinecarboxylic acid;

7-[3-(3,4-Dichlorophenyl)-3-oxoprop-1-enyl]-3-nitro-  
phenoxazinecarboxylic acid;

7-[3-(3,4-Dichlorophenyl)propyl]-3-nitrophenoxazine  
carboxylic acid;

7-[3-(3,4-Dichlorophenyl)-3-hydroxypropyl]-3-nitrophenoxazine  
carboxylic acid; and

3-Amino-7-[3-(3,4-dichlorophenyl)propyl]phenoxazine  
carboxylic acid.

Claim 6 (original): A method of treating Alzheimer's disease, the method comprising administering to a patient having Alzheimer's disease a therapeutically effective amount of a compound of claim 1.

Claim 7 (original): A method of inhibiting the aggregation of amyloid proteins to form amyloid deposits, the method comprising administering to a patient in need of inhibition of the aggregation of amyloid protein an amyloid protein aggregation inhibiting amount of a compound of claim 1.

Claim 8 (withdrawn): A method of imaging amyloid deposits, the method comprising:

- a. introducing into a patient a detectable quantity of a labeled compound according to claim 1;
- b. allowing sufficient time for the labeled compound to become associated with amyloid deposits; and
- c. detecting the labeled compound associated with the amyloid deposits.

Claim 9 (withdrawn): The method of claim 10 wherein the patient has or is suspected to have Alzheimer's disease.

Claim 10 (withdrawn): The method of claim 10 wherein the labeled compound is a radio labeled compound.

Claim 11 (withdrawn): The method of claim 10 wherein the labeled compound is detected using MRI.